

2nd International Workshop on Advances in Electrocardiography

Synopsis

Increasing understanding of brain function and increasingly sophisticated methods for recording and interpreting signals from the surface of the brain (electrocorticography (ECoG)) are opening up exciting new opportunities for using these signals for clinical or research purposes. These developments have sparked tremendous interest in human and animal ECoG recordings to investigate the basis of normal brain function related to motor control, language, or memory, as well as of abnormal function such as epileptic seizures. This workshop reviews recent research findings in this area and demonstrates examples for the emerging translation of these new findings into clinical care.

This two-day workshop series is held as an official satellite to the Society of Neuroscience meeting in San Diego. The first day focuses on current clinical use of electrocorticography, and emerging clinical opportunities. The second day focuses on principles of ECoG signals, and emerging research. This workshop series follows a hugely successful informal workshop at the American Epilepsy Society Annual Meeting in 2008 and the first formal ECoG workshop in Upstate New York in 2009.

Dates

Thursday, November 11 - Friday, November 12, 2010

Venue

Marriott Hotel and Marina, San Diego, California, USA

Organization

Research

Gerwin Schalk, Ph.D.
Research Scientist
Laboratory of Neural Injury & Repair
Wadsworth Center
Albany, New York, USA

Clinical

Anthony Ritaccio, M.D. FAAN
Professor of Neurology and Neurosurgery
Department of Neurology
Albany Medical Center
Albany, New York, USA

Sponsors



Wadsworth Center

New York State Department of Health

2nd International Workshop on Advances in Electrocorticography
Day 1, November 11, 2010
Clinical Use of Electrocorticography

Draft Program

Morning:	Current Clinical Use of Electrocorticography
8:45a-9:00a	Introductory Comments Anthony Ritaccio, M.D. (confirmed) <i>Director, Comprehensive Epilepsy Program, Albany Medical College</i>
9:00a-9:45a	Keynote Address George Ojemann, M.D. (confirmed) <i>Professor Emeritus, University of Washington School of Medicine</i>
10:00a-10:45a	Basic Chronic Identification and Localization of Epilepsy Robert Duckrow, M.D. (confirmed) <i>Associate Professor of Neurology and Neurosurgery, Yale University</i>
11:00a-11:45a	Intraoperative Identification and Localization of Epilepsy Andrew J. Cole, M.D. (confirmed) <i>Associate Professor of Neurology, Harvard Medical School</i>
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Afternoon:	Emerging Trends
1:00p-1:45p	History and Basics of ECoG Recordings Nathan Crone, M.D. (confirmed) <i>Associate Professor of Neurology, The Johns Hopkins Hospital</i>
2:00p-2:45p	Instrumentation for Emerging Clinical Applications Peter Brunner, M.S. (confirmed) <i>Research Engineer, Wadsworth Center/Albany Medical College</i>
3:00p-3:45p	Using ECoG Signals for Seizure Detection and Prediction Brian Litt, M.D. (confirmed) <i>Assoc. Prof. of Neurology and Bioengineering, University of Pennsylvania</i>
4:00p-4:45p	Using ECoG Signals for Real-Time Passive Brain Mapping Anthony Ritaccio, M.D. (confirmed) <i>Director, Comprehensive Epilepsy Program, Albany Medical College</i>

2nd International Workshop on Advances in Electrocardiography

Day 2, November 12, 2010

Research Use of Electrocardiography

Draft Program

Morning:	Principles of ECoG Signals and Their Interpretation
8:45a-9:00a	Introductory Comments Gerwin Schalk, Ph.D. (confirmed) <i>Research Scientist, Wadsworth Center; Assoc. Prof., Albany Medical College</i>
9:00a-9:45a	Keynote Address Scott Makeig, Ph.D. (confirmed) <i>Director, Swartz Center for Computational Neuroscience, UCSD</i>
10:00a-10:45a	Emerging Understanding of ECoG Signal Phenomena Kai Miller, Ph.D. (confirmed) <i>Dept. of Physics and Medicine, University of Washington</i>
11:00a-11:45a	Detecting Detailed Aspects of Behavior in Human ECoG Gerwin Schalk, Ph.D. (confirmed) <i>Research Scientist, Wadsworth Center; Assoc. Prof., Albany Medical College</i>
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Afternoon:	Emerging Research Findings
1:00p-1:45p	Flexible Passive Arrays for Chronic ECoG Recordings Justin Williams, Ph.D. (confirmed) <i>Assist. Professor of Biomedical Engineering, University of Wisconsin-Madison</i>
2:00p-2:45p	Brain-Computer Interfacing Using ECoG in Monkeys Dan Moran, Ph.D. (confirmed) <i>Assoc. Professor of Biomedical Engineering, Washington University in St. Louis</i>
3:00p-3:45p	ECoG Brain Dynamics in High-Resolution Recordings in Monkeys Pascal Fries, Ph.D. (confirmed) <i>Director, Max-Planck Institute for Brain Research, Germany</i>
4:00p-4:45p	ECoG Electrode Arrays with Active Electronics Brian Litt, M.D. (confirmed) <i>Assoc. Prof. of Neurology and Bioengineering, University of Pennsylvania</i>
5:00p-5:30p	Q & A All faculty